

PATENT COOPERATION TREATY  
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To:

NOTIFICATION CONCERNING **BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP**  
TRANSMITTAL OF COPY OF INTERNATIONAL **LOS ANGELES**  
PRELIMINARY REPORT ON PATENTABILITY  
(CHAPTER I OF THE PATENT COOPERATION  
TREATY)  
(PCT Rule 44bis.1(c))

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12400 Wilshire Boulevard  
Seventh Floor  
Los Angeles, CA 90025-1030  
ETATS-UNIS D'AMERIQUE

Date of mailing (day/month/year) 10 November 2005 (10.11.2005)		<b>IMPORTANT NOTICE</b>	
Applicant's or agent's file reference 6317P100PCT			
International application No. PCT/US2004/012468	International filing date (day/month/year) 22 April 2004 (22.04.2004)	Priority date (day/month/year) 25 April 2003 (25.04.2003)	
Applicant APPLIED MATERIALS ISRAEL, LTD. et al			

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

Entered in FIP on: 11/21/05  
By: MD  
Docketing Department

NO DOCKETING REQUIRED  
N/A.

PCT 7

NOV 21 2005

LA FIP DEPT.

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Authorized officer

Dorothee Mülhausen

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# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 6317P100PCT	<b>FOR FURTHER ACTION</b>		See item 4 below
International application No. PCT/US2004/012468	International filing date ( <i>day/month/year</i> ) 22 April 2004 (22.04.2004)	Priority date ( <i>day/month/year</i> ) 25 April 2003 (25.04.2003) ]	
International Patent Classification (IPC) or national classification and IPC H01J 37/145			
Applicant APPLIED MATERIALS ISRAEL, LTD.			

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 9 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

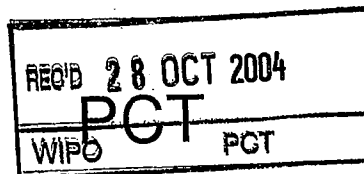
- |                                     |              |   |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I    | Basis of the report   |
| <input checked="" type="checkbox"/> | Box No. II   | Priority  |
| <input checked="" type="checkbox"/> | Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |
| <input type="checkbox"/>            | Box No. IV   | Lack of unity of invention  |
| <input checked="" type="checkbox"/> | Box No. V    | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/>            | Box No. VI   | Certain documents cited   |
| <input checked="" type="checkbox"/> | Box No. VII  | Certain defects in the international application  |
| <input checked="" type="checkbox"/> | Box No. VIII | Certain observations on the international application   |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No. +41 22 740 14 35	Date of issuance of this report 28 October 2005 (28.10.2005)
	Authorized officer  Dorothee Mülhausen  Telephone No. +41 22 338 87 40

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY



To:

see form PCT/ISA/220

11/11

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/US2004/012468

International filing date (day/month/year)  
22.04.2004

Priority date (day/month/year)  
25.04.2003

International Patent Classification (IPC) or both national classification and IPC  
H01J37/145

Applicant  
APPLIED MATERIALS ISRAEL, LTD.

### 1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

### 3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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D-80298 Munich  
Tel. +49 89 2399 - 0 Tx: 523656 epmu d  
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Authorized Officer

Oestreich, S

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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/US2004/012468

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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material:  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing:  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/US2004/012468

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**Box No. II    Priority**

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1. ☒ The following document has not been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/US2004/012468

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**Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

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The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

- ☐ the entire international application,
- ☒ claims Nos. 17,23-25,27

because:

- ☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):
- ☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 17,27 are so unclear that no meaningful opinion could be formed (*specify*):

**see separate sheet**

- ☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
- ☒ no international search report has been established for the whole application or for said claims Nos. 23-25
- ☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:
  - the written form ☐ has not been furnished
  - ☐ does not comply with the standard
  - the computer readable form ☐ has not been furnished
  - ☐ does not comply with the standard
- ☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-*bis* of the Administrative Instructions.
- ☐ See separate sheet for further details

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/US2004/012468

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**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1,2,5,8,18-22,26
Inventive step (IS)	Yes: Claims	
	No: Claims	3,4-16
Industrial applicability (IA)	Yes: Claims	1-16,18-22,26
	No: Claims	

2. Citations and explanations

**see separate sheet**

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**Box No. VII Certain defects in the international application**

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The following defects in the form or contents of the international application have been noted:

**see separate sheet**

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**Box No. VIII Certain observations on the international application**

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The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

**Re Item III.**

- 1 Claim 17 reads " [...] the upper electrode is supplied with a positive voltage". However, a voltage can only be defined between two poles. The second point of reference (pole) for the positive voltage is not defined in claim 17, the voltage is therefore not well-defined, rendering claim 17 unclear (Art 6 PCT) to such an extent that an examination of novelty and inventive step is not feasible.
- 2 Claim 27 refers back to claim 22, which itself refers back to claim 21. In neither of the claims the "minimal energy", which is claimed to be a certain value in claim 27, is defined. Claim 27 is thus unclear (Art 6 PCT) to such an extent that an examination of novelty and inventive step is not feasible.

**Re Item V.**

- 1 The following document is referred to in this communication:  
D1 : US 6 407 388 B1 (FROSIEN JUERGEN) 18 June 2002 (2002-06-18)  
D2: US-B-6 407 3881 (FROSIEN JUERGEN) 18 June 2002 (2002-06-18)  
D3: WO 99/46797 A (ESSERS ERIK) 16 September 1999 (1999-09-16)
- 2 INDEPENDENT CLAIM 1
  - 2.1 The subject-matter of claim 1 is not novel in the sense of Article 33(2) PCT , because document D1 discloses (the references in parenthesis applying to this document):  
An objective lens arrangement comprising a magnetic lens (11) and an electrostatic lens (10), wherein the electrostatic lens includes upper and lower electrodes (10 a, 10 b) arranged in a spaced apart coaxial relationship along an optical axis of the lens arrangement.

**3 INDEPENDENT CLAIM 18**

The only substantial difference of claim 18 with respect to claim 1 is that the upper and lower electrodes be associated with a separate voltage supply. As far as this feature is can be understood (see remarks on item **VIII** below), this feature is disclosed implicitly in document D1, as the electrodes would not work as electrostatic lens without voltage being supplied, thus requiring a voltage supply.



- 1 Claim 3 is drafted as being dependent on claim 1, however the additional technical feature of claim 2 ( being dependent on claim 1) is present in claim 3 which therefore is dependent on claim 2 and should be drafted accordingly.
- 2 The additional technical features of claim 7 (being dependent on claim 1) appear to be identical of the additional technical features of claims 6 and 5 (claim 6 being dependent on claim 5, the latter being dependent on claim 1).  
Claim 7 thus needs to be deleted.
- 3 The claims do not fulfill the requirements of Rule 6.3 (b) (two part form) and Rule 6.2 (b) (reference signs).

**Re Item VIII**

- 1 In claim 18, the term "associated with a separate voltage supply" is unclear. Firstly, the meaning of "separate" is unclear, as the voltage supply of the electrodes must be connected in some way to each other to ensure defined potentials. Secondly "associated" is vague and undefined; either the electrode is connected or not to a voltage supply, association is not an issue.
- 2 In claim 26, it is not apparent which features are claimed as technical features and which are effects resulting therefrom ( " thereby reducing..."), rendering claim 26 unclear.